

What is claimed is:

1. A loop flushing circuit comprising:
a variable displacement hydraulic pump;
a hydraulic motor fluidly connected to the pump in a closed
5 loop circuit by first and second system pressure lines;
said hydraulic motor fluidly connected to the first and
second system pressure lines;
an electrically proportional control valve in at least one
of the system pressure lines is fluidly connected to
10 the hydraulic motor and adapted to regulate the
flushing flow of the closed loop circuit, and
a control means connected to the control valves in order to
provide a loop flushing flow by activating only the
control valve which is connected to a low pressure side
15 of the loop flushing circuit.

2. The loop flushing circuit of claim 1 wherein the
control means is a valve actuator.

20 3. The loop flushing circuit of claim 1 wherein the
control means is an electrical actuator

4. The loop flushing circuit of claim 1 wherein the
electrically proportional flow control valve is a spool
25 valve.

5. The loop flushing circuit of claim 1 wherein the
electrically proportional flow control valve is a poppet
valve.

30 6. The loop flushing circuit of claim 1 wherein the
control device actuates the electrically proportional flow

control valve based on operational parameters detected by the control device.

7. A loop flushing circuit comprising:

- 5 a variable displacement hydraulic pump;
- a hydraulic motor fluidly connected to the pump in a closed loop circuit by first and second system pressure lines; said hydraulic motor fluidly connected to the first and second system pressure lines;
- 10 a shuttle valve fluidly connected to the hydraulic motor; an electrically proportional control valve fluidly connected to the shuttle valve and adapted to regulate the flushing flow of the closed loop circuit, and a control means operably connected to the electrically proportional flow control valve adapted to open the electrically proportional flow control valve in a pressure line is below a threshold pressure.
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8. The loop flushing circuit of claim 7 wherein the control means is a valve actuator.
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9. The loop flushing circuit of claim 7 wherein the control means is an electrical actuator

- 25 10. The loop flushing circuit of claim 7 wherein the electrically proportional flow control valve is a spool valve.

- 30 11. The loop flushing circuit of claim 7 wherein the electrically proportional flow control valve is a poppet valve.

12. The loop flushing circuit of claim 7 wherein the control device actuates the electrically proportional flow control valve based on operational parameters detected by the control device.